IN THE CLAIMS

Please amend the claims as follows:

Claims 1-29 (Canceled).

30. (Currently Amended) A high voltage rotating electric machine comprising:

a rotor;

a stator having a slot; and

a winding having a plurality of cable layers that each include an inner conductor with a plurality of strands and an insulation disposed about said inner conductor, said plurality of cable layers ~~being~~ arranged substantially axially through said slot and substantially radially outside one another, wherein

said plurality of cable layers includes an inner cable layer and an outer cable layer, said inner cable layer ~~being~~ disposed in said slot radially closer to said rotor than said outer cable layer,

a larger ~~share of stands~~ number of strands in said inner cable layer are electrically insulated from one another than strands in the inner conductor of said outer cable layer.

31. (Currently Amended) A high voltage rotating electric machine according to Claim 30, wherein:

said inner cable layer ~~being~~ is an innermost cable layer with regard to a radial proximity to said rotor, and wherein substantially all of the plurality of strands of the innermost cable layer include an electrical insulation thereabout.

32. (Currently Amended) A high voltage rotating electric machine according to Claim 30, wherein:

said outer cable layer ~~being~~ is an outermost cable layer with regard to a radial proximity to said rotor, and substantially none of the plurality of strands of the outermost cable layer include an electrical insulation thereabout.

33. (Previously Presented) A high voltage rotating electric machine according to Claim 30, wherein:

a portion of strands insulated from one another in the inner conductor of respective of the plurality of cable layers decreases on a cable layer by cable layer basis as a distance to the rotor increases.

34. (Previously Presented) A high voltage rotating electric machine according to Claim 30, wherein:

a portion of the plurality of strands configured to have an electrical insulation within each layer of the plurality of cable layers decreases as a distance to the rotor increases on a cable layer by cable layer basis.

35. (Previously Presented) A high voltage rotating electric machine according to Claim 30, wherein:

a portion of the plurality of strands configured to have an electrical insulation thereabout decreases as a distance to the rotor increases by two or more layers of the plurality of cable layers, where said distance is on a cable layer by cable layer basis.

36. (Previously Presented) A high voltage rotating electric machine according to Claim 30, wherein:

a plurality of slots are arranged in the stator.

37. (Previously Presented) A high voltage rotating electric machine according to Claim 30, wherein:

a circuit formed between the stator and rotor is configured for high voltage operation;

the plurality of cable layers are configured to have an electric potential developed therein that increases as a distance between the winding and the rotor increases; and

an insulation thickness of the insulation decreases in at least one of a continuous manner and a stepwise manner as a distance from the rotor increases on a cable layer by cable layer basis.

38. (Previously Presented) A high voltage rotating electric machine according to Claim 30, wherein:

the insulation comprises a thin electrically insulating envelope.

39. (Previously Presented) A high voltage rotating electric machine according to Claim 38, wherein:

the thin electrically insulating envelope comprises an insulating lacquer.

40. (Currently Amended) A high voltage rotating electric machine according to Claim 30, wherein:

a strand that is insulated in the inner cable ~~is comprised of~~ comprises aluminum, and an insulation on the strand is an aluminum oxide.

41. (Currently Amended) A high voltage rotating electric machine according to Claim 38, wherein:

a portion of the plurality of strands in said inner cable layer that are insulated ~~are comprised of~~ comprises aluminum and a portion of the plurality of strands in the inner cable layer that are uninsulated are comprised of copper.

42. (Currently Amended) A high voltage rotating electric machine according to Claim 30, wherein:

said inner cable layer being an innermost cable layer with regard to a radial proximity to said rotor, substantially all of the plurality of strands are comprised of aluminum; and

said outer cable layer ~~being~~ is an outermost cable layer with regard to a radial proximity to said rotor, substantially all of the plurality of strands ~~are comprised of~~ comprises copper.

43. (Previously Presented) A high voltage rotating electric machine according to Claim 42, wherein:

the winding comprises a flexible electric conductor and a casing configured to contain an electric field generated around the flexible electric conductor.

44. (Previously Presented) A high voltage rotating electric machine according to Claim 43, wherein:

the casing comprises an insulation system having an inner layer disposed on the flexible electric conductor, a solid insulation layer disposed on the inner layer, and an outer layer disposed on the solid insulation layer, wherein the outer layer is configured to have an electric conductivity higher than that of the solid insulation layer and is connected to a node having at least one of a ground potential and a low voltage potential so as to contain the electric field formed around the flexible electric conductor.

45. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer is configured to have an electric conductivity lower than the flexible electric conductor and to substantially equalize an electric field formed on an outer surface of the inner layer.

46. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer, the outer layer and the solid insulation layer are configured to have an essentially equal thermal characteristic.

47. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer and the outer layer comprise a semiconductor material.

48. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer and the outer layer are configured to have a resistivity in an inclusive range of $10^{-6}\Omega$ - 1000Ωcm.

49. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer and the outer layer are configured to have a resistivity in an inclusive range of $10^{-3}\Omega$cm - 1000Ωcm.

50. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer and the outer layer are configured to have a resistivity in an inclusive range of 1Ωcm - 500Ωcm.

51. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer and the outer layer are configured to have a resistance in an inclusive range of 50μΩ/m - 5MΩ/m.

52. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the solid insulation layer and at least one of the inner layer and the outer layer comprise a polymeric material.

53. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the solid insulation layer, the inner layer and the outer layer are configured to ensure adherence upon flexing and temperature change.

54. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the solid insulation layer, the inner layer and the outer layer comprise materials with high elasticity.

55. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the solid insulation layer, the inner layer and the outer layer are comprised of materials with a substantially equal E-modulus.

56. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the solid insulation layer, the inner layer and the outer layer are comprised of materials with a substantially equal thermal expansion coefficients.

57. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the inner layer is configured to be in electrical contact with the flexible electric conductor.

58. (Previously Presented) A high voltage rotating electric machine according to Claim 44, wherein:

the flexible electric conductor comprises a plurality of strands, and

at least one portion of at least one of the plurality of strands is uninsulated and configured to be in contact with the inner layer.

59. (Previously Presented) A high voltage rotating electric machine according to Claim 42, wherein:

the winding is configured to carry voltages greater than 10 kV.

60. (Previously Presented) A high voltage rotating electric machine according to Claim 59, wherein:

the winding is configured to carry voltages greater than 36 kV.

61. (Previously Presented) A high voltage rotating electric machine according to Claim 60, wherein:

the winding is configured to carry voltages greater than 72.5 kV.

62. (Previously Presented) A high voltage rotating electric machine according to Claim 42, wherein:

the winding is configured to be connected to a voltage greater than 10 kV.

63. (Previously Presented) A high voltage rotating electric machine according to Claim 62, wherein:

the winding is configured to be connected to a voltage greater than 36 kV.

64. (Previously Presented) A high voltage rotating electric machine according to Claim 63, wherein:

the winding is configured to be connected to a voltage greater than 72.5 kV.

65. (Canceled)